

Abstract

Rectifier circuit matched for power factor correction

The invention relates to a rectifier circuit matched for power factor correction, comprising a first diode (D1), a second diode (D2), a third diode (D3) and a fourth diode (D4) in bridge arrangement, an inductance (L1) and a capacitance (C1), with a first pole (10) and a second pole (12) of the bridge arrangement being connected to a source (U) which has at least one AC voltage component, and the inductance (L1) being arranged in series with the third pole (14) or the fourth pole (16), where the capacitance (C1) is connected between the first pole (10) and the second pole (12), and two of the four diodes (D1, D2, D3, D4) are in the form of fast diodes.

(Figure 2a)

T 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100